AMENDMENTS TO THE CLAIMS

1-9. (Cancel).

10. (Original) A method of identifying a cell surface antigen specific to substantially only one of a plurality of cell types, the method comprising the steps of:

(a) providing a plurality of cell types with cell surface antigens such that each cell type has a different membrane-anchored electrophoretic probe, the membrane-anchored electrophoretic probe having a membrane anchoring moiety connected by a cleavable linkage to an electrophoretic tag, wherein said cleavable linkage is chemically cleavable, photochemically cleavable, or enzymatically cleavable, said tag having distinct optical or electrophoretic properties with respect to electrophoretic tags of other cell types of the plurality;

(b) combining the one or more cell types with a candidate antibody and isolating cell types having at least one antibody bound to at least one cell surface antigen;

(c) exposing the cell types and antibody to conditions such that at least one cleavable linkage is cleaved in at least one membrane-anchored electrophoretic probe of cells having a cell surface antigen to which said antibody is bound, whereby one or more electrophoretic tags are released;

(d) electrophoretically separating and determining the relative quantities of the one or more released electrophoretic tags to determine whether the candidate antibody binds to a cell surface antigen present on substantially only one of the plurality of cell types; and

(e) repeating steps (b)-(d) until a cell surface antigen specific to substantially only one of the plurality of cell types is identified.

11. (Original) The method of claim 10, wherein said exposing comprises

attaching to each cell having a bound antibody, a proximity-dependent cleavage inducing group, such that each said probe is cleavable only by such a cleavage inducing group on the same cell surface as the probe, and

activating said cleavage inducing group.

12. (Original) The method of claim 11, wherein said probe is cleavable by a ~~short-lived~~ chemical species generated by a sensitizer group, and said exposing includes

attaching such a sensitizer group to each cell having a bound antibody, and

activating the sensitizer group.

13. (Original) The method of claim 12, wherein the sensitizer group is a photosensitizer.

14. (Original) The method of claim 13, wherein the sensitizer group is attached to the antibody.

15. (Original) The method of claim 13, wherein the sensitizer is conjugated to a secondary antibody immunospecific against the antibody, and said exposing includes adding the secondary antibody and conjugated sensitizer to the cells and bound antibody.

16. (Cancel).

17. (Cancel).

18. (Original) The method of claim 10, wherein the determining of step (d) comprises measuring the area of tag peaks in an electropherogram of said released tags, and identifying a cell surface antigen specific to substantially only one of the plurality of cell types comprises identifying one test tag peak in said electropherogram that is at least 90% of the sum of the areas of all the test tag peaks in the electropherogram.

19. (Original) The method of claim 18, wherein said one test eTag peak is at least 95% of the sum of the areas of all the test eTag peaks in the electropherogram.

20. (Original) The method of claim 18, wherein identifying a cell surface antigen specific to substantially only one of the plurality of cell types comprises identifying one test tag peak in said electropherogram having an area that is at least twice the area of the next largest test tag peak in the electropherogram.

21. (Original) The method of claim 20, wherein said one test tag peak is at least four times the area of the next largest test tag peak in the electropherogram.

22-37. (Cancel).